

AMENDMENTS TO THE CLAIMS

Claim 1 (Cancelled)

Claim 2 (Currently amended): [The manufacturing method of an active matrix substrate according to claim 1, further comprising a step of]

A manufacturing method of an active matrix substrate comprising the steps of:

a film laminated step for depositing a plurality of films to form laminated films on an insulating substrate;

a resist pattern formation step for forming a resist pattern having a plurality of film thicknesses on said laminated films;

a first etching step for etching said laminated films; using said resist pattern as a first etching mask;

a resist etching step for etching said resist pattern to remove a thinner portion of said resist pattern; and

a second etching step for etching said laminated films using a remaining portion of said resist pattern left after said resist etching process as a second etching mask, and

forming a first conductive film pattern on said insulating substrate before said film lamination step in which an insulation layer, a semiconductor film, an ohmic semiconductor film and a second conductive film are deposited in order covering said first conductive film pattern to form said laminated films,

wherein said resist pattern is formed so as to have a first portion of said resist pattern thicker than a second portion and said second portion of said resist pattern with an opening therein,

at least top two films of said laminated films in said opening are etched and removed in said first etching step,

said resist pattern is etched to remove said second portion in said resist etching step,

at least an uppermost film of said laminated films is etched and removed in said second etching step, and

after said resist etching step, a contact hole formation step for a remaining films of said laminated films in said opening left is etched and removed to form a contact hole in said insulation layer reaching a surface of said first conductive film pattern.

Claim 3 (Original): The manufacturing method of an active matrix substrate according to claim 2, wherein

said first conductive film pattern is a gate wiring including a gate electrode, and

after said contact hole formation step, further comprising a lead wiring formation step for removing said resist pattern,

depositing a third conductive film on said insulating,

forming a wiring formation resist pattern on said third conductive film,

etching and removing said third conductive film together with upper films

constituting said laminated films and locating higher than said semiconductor film by using said wiring formation resist pattern as a third etching mask to form source/drain electrodes consisting of said third conductive film and said upper films, and to form a lead wiring covering said contact hole.

Claim 4 (Original): The manufacturing method of an active matrix substrate according to claim 3, wherein any one of said source/drain electrodes is connected with said lead wiring of said third conductive film.

Claim 5 (Original): The manufacturing method of an active matrix substrate according to claim 3, wherein said lead wiring constitutes a terminal electrode to be connected with an external device in periphery of said insulating substrate.

Claim 6 (Currently amended): The manufacturing method of an active matrix substrate according to claim 4 2, wherein said thinner portion of said resist pattern is etched by anisotropic etching using active species that are generated by plasma enhancing a halogen compound gas and an oxygen gas.

Claim 7 (Currently amended): The manufacturing method of an active matrix substrate according to claim 4 2, wherein said resist pattern has a plurality of film thicknesses and is formed by exposing a resist film once through a photomask with a mask pattern consisting of light shielding portion, a light half-transmitting portion and a light transmitting portion, and developing said resist film.

Claim 8 (Original): The manufacturing method of an active matrix substrate according to claim 7, wherein said resist film consists of two resist films laminated having different exposure sensitivity from each other.

Claim 9 (Currently amended): The manufacturing method of an active matrix substrate according to claim 1 2, wherein said resist pattern has a plurality of film thicknesses which is formed by exposing sequentially a resist film by using a photomask selected from photomasks with different mask patterns from each other for each exposure, and developing said resist film.

Claim 10 (Original): The manufacturing method of an active matrix substrate according to claim 9, wherein said each exposure is executed by using different amount of exposure light from each other.

Claim 11 (Original) The manufacturing method of an active matrix substrate according to claim 9, wherein said resist film consists of two resist films laminated having different exposure sensitivity from each other.